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EXAMINER

NGUYEN, J

ART UNIT

PAPER NUMBER

2778

7

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**08/900,964**

Applicant(s)  
**Richard D. Cappels**

Examiner  
**Jimmy H. Nguyen**

Group Art Unit  
**2778**



☒ Responsive to communication(s) filed on Jul 25, 1997

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-25 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-25 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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**Detailed Action**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-3, 11-13, 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee (USPN: 5,555,026).

In regard to claims 1, 11, 19 and 20, the claimed invention reads on Lee as follows: Lee discloses a method and an apparatus for displaying a sub-picture within a main picture comprising **a video signal adjuster 70 and an amplifier 80** (a control device) for **separately adjusting** a brightness of a video signal of the main picture and of the sub-picture according to the automatic beam limiter (ABL) control signals and providing processed amplified signals to video display

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(figure 2, column 4, lines 29-44). Lee further discloses a **video signal processor 10** (a window generator) coupled to video display for generating a control signal SEL and applying it to video signal adjuster to generate the brightness of the sub-picture (figure 2, column 4, lines 4-28). The elements in the claims 1 and 20, and the steps in claims 11 and 19 are read in the reference.

In regard to claims 2 and 12 as respectively applied to claims 1 and 11 above, Lee discloses a **sub-picture beam current detector 20, a switching unit 40 and a main picture beam current detector 40** (a limiter device) coupled to video display for providing ABL control signal in response to a control signal SEL to adjust a brightness or contrast of the sub-picture or main picture or both (column 4, lines 4-40). The elements in the claim 2 and the steps in claim 12 are read in the reference.

In regard to claims 3 and 13 as respectively applied to claims 2 and 12 above, Lee discloses a **high voltage generator 30** (a power supply) and the ABL 40 detects beam current flowing from the anode to a cathode due to the high voltage generated in high voltage generator (column 4, lines 11-19). The elements in the claim 2 and the steps in claim 12 are read in the reference.

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*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-10, 14-18 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Lagoni (USPN: 5,204,748).

In regard to claims 4 and 14 as respectively applied to claims 3 and 13 above, Lee discloses a **controller 60** for generating control signals for controlling the contrast, brightness, color, and tone of the picture. Lee does not disclose expressly that a controller provides a control signal for controlling a position and size of the sub-picture. Lagoni teaches that a receiver control 7 generates a control signal in response to a user initiated command entered via a remote control unit for controlling the location and size of the small picture (figures 1 and 1a, column 3, lines 25-43). Lee and Lagoni are analogous art because they are from the same field of endeavor, that is the display art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the receiver control unit of Lagoni with the apparatus of Lee. The

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suggestion for doing so would have been to control the location and size of the sub-picture in response to the user's command. Therefore, it would have been obvious to combine Lee with Lagoni to obtain the invention as specified in claims 4 and 14.

In regard to claims 5 and 15 as respectively applied to claims 4 and 14 above, Lee discloses a video display including a **cathode ray tube** which receives the amplified signals (figure 2, column 4, lines 41-44). Therefore, these claims are rejected for the reason as set forth above.

In regard to claims 6 and 16 as respectively applied to claims 5 and 15 above, Lee discloses an **amplifier 80** (a video amplifier) receiving input signals which are video signals provided by video signal processor (figure 2, column 4, lines 41-44). Therefore, these claims are rejected for the reason as set forth above.

In regard to claims 7 and 17 as respectively applied to claims 6 and 16 above, Lee discloses that a switching unit 50 generates and provides an analog ABL control signal to video signal adjuster in response to a selection control signal SEL (column 4, lines 20-28). Therefore, these claims are rejected for the reason as set forth above.

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In regard to claims 8 and 18 as respectively applied to claims 7 and 17 above, Lee discloses a switching unit provides a ABL control signal to control the brightness or contrast of pictures (column 4, lines 36-40). Therefore, these claims are rejected for the reason as set forth above.

In regard to claim 9 as applied to claim 8 above, Lee discloses a picture beam current detector 40 controls the beam current flowing from the anode to a cathode of CRT (column 4, lines 11-19). Therefore, this claim is rejected for the reason as set forth above.

In regard to claim 10 as applied to claim 9 above, Lagoni discloses a control unit 7 comprising a microprocessor operating under the control of a stored program (column 5, lines 2-3). Therefore, this claim is rejected for the reason as set forth above.

In regard to claim 21, Lee discloses a video display comprising **a video signal adjuster 70 and an amplifier 80** (a video amplifier) for **separately adjusting** a brightness of a video signal of the main picture and of the sub-picture according to the automatic beam limiter (ABL) control signals and amplifying the video signals for displaying on CRT (figure 2, column 4, lines 29-44). Lee alsodiscloses **a video signal processor 10** (a window generator) coupled to video display for generating a control signal SEL and applying it to video signal adjuster to generate the brightness of the sub-picture (figure 2, column 4, lines 4-28). Lee further discloses a **controller**

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60 for generating control signals for controlling the contrast, brightness, color, and tone of the picture. Lee does not disclose expressly that a controller provides a control signal for controlling a position and size of the sub-picture. Lagoni teaches that a **receiver control unit 7** (a computer processor) generates a control signal in response to a user initiated command entered via a remote control unit for controlling the location and size of the small picture (figures 1 and 1a, column 3, lines 25-43). Lee and Lagoni are analogous art because they are from the same field of endeavor, that is the display art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the receiver control unit of Lagoni with the apparatus of Lee. The suggestion for doing so would have been to control the location and size of the sub-picture in response to the user's command. Therefore, it would have been obvious to combine Lee with Lagoni to obtain the invention as specified in claim 21.

In regard to claim 22 as applied to claim 21 above, Lagoni discloses a control unit 7 comprising a microprocessor operating under the control of a stored program (column 5, lines 2-3). Lagoni further discloses that the auxiliary video signal source may be an external VCR or some other composite video signal sources (column 1, lines 14-25). Therefore, this claim is rejected for the reason as set forth above.

In regard to claim 23 as applied to claim 21 above, Lee discloses a **sub-picture beam current detector 20, a switching unit 40 and a main picture beam current detector 40** (an



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automatic beam limiter) coupled to video display for providing ABL control signal in response to a control signal SEL to adjust a brightness or contrast of the sub-picture or main picture or both (column 4, lines 4-40). Therefore, this claim is rejected for the reason as set forth above.

In regard to claim 24 as applied to claim 23 above, Lee discloses **a video signal adjuster 70 and an amplifier 80** (a video amplifier) for **separately adjusting** a brightness of a video signal of the main picture and of the sub-picture according to the automatic beam limiter (ABL) control signals and amplifying the video signals for displaying on CRT (figure 2, column 4, lines 29-44). Therefore, this claim is rejected for the reason as set forth above.

In regard to claims 23 and 25 as respectively applied to claims 21 and 24 above, Lee discloses **a sub-picture beam current detector 20, a switching unit 40 and a main picture beam current detector 40** (an automatic beam limiter or a limiter circuit) coupled to video display for providing ABL control signal in response to a control signal SEL to adjust a brightness or contrast of the sub-picture or main picture or both (column 4, lines 4-40). Therefore, these claims are rejected for the reason as set forth above.

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*Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No.	5,386,247	Shafer et al.
U.S. Patent No.	5,473,371	Choi
U.S. Patent No.	5,574,507	Baek
U.S. Patent No.	5,675,391	Yamaguchi et al.
U.S. Patent No.	5,742,354	Vlahos et al.

The references Shafer et al., Choi, Baek, Yamaguchi et al. And Vlahos et al. are made of record as they disclose an apparatus and a method for displaying a plurality of images on a cathode ray tube, and more particularly controlling the contrasts and/or brightnesses of the plurality of images.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is (703) 306-5422. The examiner can normally be reached on Monday thru Thursday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached on (703) 305-4938.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

Any response to this action should be mailed to:

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or faxed to:

(703) 308-9051 (for formal communications intended for entry)

(703) 308-6606 (for informal or draft communications, please label

“Proposed” or “Draft”)

Hand delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth floor (Receptionist).

JHN

April 28, 1999

*Lun-Yi Lao*  
Lun-Yi Lao  
Primary Examiner